

AMENDMENTS

AMENDMENTS TO THE CLAIMS

This listing of claims is intended to replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method for ~~fulfilling an order~~ moving one or more physical items in a supply chain that is distributed over a plurality of geographic locations, comprising:

extracting via a computer network information from a customer maintenance system indicative of a change in a scheduled maintenance work order to create ~~receiving~~ an advance demand notice ~~representative of the order~~ that includes a specification of the one or more physical items ~~of interest to the customer~~; and

using a network of intelligent software agents to move each of the one or more physical items specified in the advance demand notice to a respective at least one of the plurality of geographic locations within the supply chain as a function of a probability of need for each ~~item~~ of the one or more physical items.

2. (Canceled)

3. (Canceled)

4. (Currently Amended) The method as recited in claim ~~3~~ 1, wherein the step of extracting information from a customer maintenance system indicative of a change in a scheduled maintenance work order ~~creating the advance demand notice order in response~~

~~to a change in a scheduled maintenance work order~~ comprises modifying an existing advance demand notice.

5. (Currently Amended) The method as recited in claim 1, further comprising the step of using an equipment knowledge base to determine the probability of need for each of the one or more physical item items.

6. (Currently Amended) The method as recited in claim 1, further comprising the step of coordinating with a carrier via a computer network to move each of the one or more physical items within the supply chain.

7. (Currently Amended) The method as recited in claim 6, further comprising the step of using the intelligent software agents to form a fulfillment plan for use in moving each of the one or more physical items within the supply chain.

8. (Currently Amended) The method as recited in claim 7, further comprising the step of monitoring via a computer network the movement of each of the one or more physical items within the supply chain.

9. (Currently Amended) The method as recited in claim 8, further comprising the step of forming an alternative fulfillment plan for use in moving each of the one or more physical items to at least one of the plurality of geographic locations within the supply

chain if the intelligent software agents determine from the monitoring that the supply chain is unable to meet a previously formed fulfillment plan commitment.

10. (Currently Amended) The method as recited in claim 1, further comprising the step of ordering each of the one or more physical items from a supplier via a computer network to initiate ~~the staging~~ movement of the one or more physical items within the supply chain.

11. (Currently Amended) The method as recited in claim 1, further comprising the step of ordering each of the one or more physical items from a supplier to replenish the physical items at at least one of the plurality of geographic locations within the supply chain as each of the one or more physical items are moved to at least one different one of the plurality of geographic locations within the supply chain.

12. (Currently Amended) The method as recited in claim 1, further comprising the step of using a customer defined level of service to move each of the one or more physical items specified in the advance demand notice.

13. (Previously Amended) The method as recited in claim 1, further comprising the step of determining if the probability of need for a physical item specified in the advance demand notice is 100% and, if so, converting the advance demand notice into a purchase order for that physical item.

14. (Currently Amended) The method as recited in claim 1, further comprising the step of using ~~the current and developing~~ states of inventory of each of the one or more physical items at one or more of the plurality of geographic locations within the supply chain to move each of the one or more physical items specified in the advance demand notice within the supply chain.

15. (Currently Amended) The method as recited in claim 1, further comprising the step of taking into account a desired level of safety stock of each of the one or more physical items at one or more of the plurality of geographic locations when moving each of the one or more physical items specified in the advance demand ~~note~~ notice within the supply chain.

16. (Currently Amended) The method as recited in claim 1, wherein the advance demand notice includes a probability of need for each of the one or more physical ~~item~~ items.

17. (Currently Amended) The method as recited in claim 1, further comprising the step of using sourcing options specified by a customer to provide physical item alternatives to one or more of the one or more physical items specified in the advance demand notice.

18. (Currently Amended) A method for ~~fulfilling an order~~ moving one or more physical items in a supply chain that is distributed over a plurality of geographic locations, comprising:

extracting from a customer system information pertaining to a work order that specifies a piece of equipment to be repaired and the one or more physical items expected to be used during the repair procedure;

determining, using an equipment knowledge base, a probability that each of the one or more physical items will be needed to effect the repair procedure;

using the determined probability to move the one or more physical items to a respective at least one of the geographic locations within the supply chain whereby the one or more physical items are made ready for use in the repair procedure;

extracting from the customer system information pertaining to a completion of the repair procedure; and

using the information pertaining to the completion of the repair procedure to populate the equipment knowledge base for use in future probability of need calculations.

19. (Canceled)

20. (New) A computer-readable media having instructions for facilitating movement of a physical item in a supply chain that is distributed over a plurality of geographic locations, the instructions performing steps comprising:

extracting via a computer network information from a customer maintenance system indicative of a change in a scheduled maintenance work order to create an advance demand notice that includes a specification of the physical item; and

using a network of intelligent software agents to move the physical item specified in the advance demand notice to at least one of the plurality of geographic locations within the supply chain as a function of a probability of need for the physical item.

21. (New) The computer-readable media as recited in claim 20, wherein the step of extracting information from a customer maintenance system indicative of a change in a scheduled maintenance work order comprises modifying an existing advance demand notice.

22. (New) The computer-readable media as recited in claim 20, wherein the instructions perform a step of using an equipment knowledge base to determine the probability of need for the physical item.

23. (New) The computer-readable media as recited in claim 20, wherein the instructions perform a step of coordinating with a carrier via a computer network to move the physical item within the supply chain.

24. (New) The computer-readable media as recited in claim 23, wherein the instructions perform a step of using the intelligent software agents to form a fulfillment plan for use in moving the physical item within the supply chain.

25. (New) The computer-readable media as recited in claim 24, wherein the instructions perform a step of monitoring via a computer network the movement of the physical item within the supply chain.

26. (New) The computer-readable media as recited in claim 25, wherein the instructions perform a step of forming an alternative fulfillment plan for use in moving the physical item to at least one of the plurality of geographic locations within the supply chain if the intelligent software agents determine from the monitoring that the supply chain is unable to meet a previously formed fulfillment plan commitment.

27. (New) The computer-readable media as recited in claim 20, wherein the instructions perform a step of ordering the physical item from a supplier via a computer network to initiate movement of the physical item within the supply chain.

28. (New) The computer-readable media as recited in claim 20, wherein the instructions perform a step of ordering the physical item from a supplier to replenish the physical items at at least one of the plurality of geographic locations within the supply chain as the physical item is moved to at least one different one of the plurality of geographic locations within the supply chain.

29. (New) The computer-readable media as recited in claim 20, wherein the instructions perform a step of using a customer defined level of service to move the physical item specified in the advance demand notice.

30. (New) The computer-readable media as recited in claim 20, wherein the instructions perform a step of determining if the probability of need for the physical item specified in the advance demand notice is 100% and, if so, converting the advance demand notice into a purchase order for the physical item.

31. (New) The computer-readable media as recited in claim 20, wherein the instructions perform a step of using states of inventory of the physical item at one or more of the plurality of geographic locations within the supply chain to move the physical item specified in the advance demand notice within the supply chain.

32. (New) The computer-readable media as recited in claim 20, wherein the instructions perform a step of taking into account a desired level of safety stock of the physical item at one or more of the plurality of geographic locations when moving the physical item specified in the advance demand notice within the supply chain.

33. (New) The computer-readable media as recited in claim 20, wherein the advance demand notice includes a probability of need for the physical item.

34. (New) The computer-readable media as recited in claim 20, wherein the instructions perform a step of using sourcing options specified by a customer to provide physical item alternatives to the physical item specified in the advance demand notice.

35. (New) A computer-readable media having instructions for moving one or more physical items in a supply chain that is distributed over a plurality of geographic locations, the instructions performing steps comprising:

extracting from a customer system information pertaining to a work order that specifies a piece of equipment to be repaired and the one or more physical items expected to be used during the repair procedure;

determining, using an equipment knowledge base, a probability that each of the one or more physical items will be needed to effect the repair procedure; and

using the determined probability to move each of the one or more physical items to a respective at least one of the geographic locations within the supply chain whereby the one or more physical items are made ready for use in the repair procedure.

36. (New) The computer-readable media as recited in claim 35, wherein the instructions perform a step of extracting from the customer system information pertaining to a completion of the repair procedure.

37. (New) The computer-readable media as recited in claim 36, wherein the instructions perform a step of using the information pertaining to the completion of the repair procedure to populate the equipment knowledge base for use in future probability of need calculations.

38. (New) The computer-readable media as recited in claim 35, wherein the instructions perform a step of coordinating with a carrier via a computer network to move each of the one or more physical items within the supply chain.

39. (New) The computer-readable media as recited in claim 35, wherein the instructions perform a step of monitoring via a computer network the movement of each of the one or more physical items within the supply chain.

40. (New) The computer-readable media as recited in claim 39, wherein the instructions perform a step of forming an alternative fulfillment plan for use in moving each of the one or more physical items to at least one of the plurality of geographic locations within the supply chain if it is determined from the monitoring that the supply chain is unable to meet a previously formed fulfillment plan commitment.

41. (New) The computer-readable media as recited in claim 35, wherein the instructions perform a step of ordering each of the one or more physical items from a supplier via a computer network to initiate movement of the one or more physical items within the supply chain.

42. (New) The computer-readable media as recited in claim 35, wherein the instructions perform a step of ordering each of the one or more physical items from a supplier to replenish the physical items at at least one of the plurality of geographic locations within

the supply chain as each of the one or more physical items are moved to at least one different one of the plurality of geographic locations within the supply chain.

43. (New) The computer-readable media as recited in claim 35, wherein the instructions perform a step of considering states of inventory of each of the one or more physical items at one or more of the plurality of geographic locations within the supply chain when moving each of the one or more physical items.

44. (New) The computer-readable media as recited in claim 35, wherein the instructions perform a step of taking into account a desired level of safety stock of each of the one or more physical items at one or more of the plurality of geographic locations when moving each of the one or more physical items.

45. (New) The computer-readable media as recited in claim 35, wherein the instructions perform a step of using sourcing options specified by a customer to provide physical item alternatives to one or more of the one or more physical items.